PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6:

29/31

(11) International Publication Number:

WO 97/24169

B01D 27/14, 27/00, 29/50, 46/24, 25/02,

A2

(43) International Publication Date:

10 July 1997 (10.07.97)

(21) International Application Number:

PCT/US96/20336

(22) International Filing Date:

20 December 1996 (20.12.96)

(30) Priority Data:

60/009,032

US 21 December 1995 (21.12.95)

(71) Applicant (for all designated States except US): PALL COR-PORATION [US/US]; 2200 Northern Boulevard, East Hills, NY 11548 (US).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): CONNORS, James, T., Jr. [US/US]; 210 West Cortland Street, Groton, NY 13073 (US). MILLER, John, D. [US/US]; 511 Kline Road, Ithaca, NY 14850 (US). PERI, Joseph, A. [US/US]; HC65 Box 549 Union Valley Road, DeRuyter, NY 13052 (US). MAYBEE, Stephen, J., A. [US/US]; 3200 Taughannock Park Road, Trumansburg, NY 14886 (US). STOYELL, Richard, C., Jr. [US/US]; R.D. 2, Box 141, Moravia, NY 13118 (US).
- (74) Agents: EVENS, Carl, J. et al.; Leydig, Voit & Mayer, Suite 300, 700 Thirteenth Street N.W., Washington, DC 20005 (US).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL. PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published

Without international search report and to be republished upon receipt of that report.

(54) Title: SEPARATION ARRANGEMENT

(57) Abstract

A separation assembly includes a separation element disposed in a reusable cage. The separation element preferably has a pleated pack with the pleats in a laid-over pleat configuration and two end caps. One of the two end caps is expandable or slidable between a first position and a second position for reducing the forces acting upon the separation element while maintaining a fluid tight seal when the separation element is under the influence of these forces. The application also concerns elongated hollow separation elements which are formed on the one hand of a single hollow pleated pack, on the other hand of adjoining pack sections. It further deals with the arrangement and maintaining of the pleats of the porous medium of the separation element.